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ABSTRACT

A practical application of the Planning, Monitoring, and Implementation Model (PMI) is illustrated in the evaluation of the District of Columbia Public Schools' Student Progress Plan. The plan adheres to the principle that the student be encouraged to move along an instructional continuum at his or her individual rate. The Division of Research and Evaluation employed the PMI model to evaluate the implementation of the Student Progress Plan in grades 1-3 for school year 1980-81. The PMI model allowed for the enumeration of intended inputs, processes, and outcomes; monitoring of each stage of implementation; and easy identification of discrepancies. The appendices contain an evaluation design based on the PMI model, data collection instruments, and the questionnaire to be completed by principals and classroom teachers. (Author/MLF)

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APPLICATION OF THE PMI MODEL AT THE SYSTEM LEVEL: EVALUATION OF A SYSTEMWIDE PROGRAM IMPLEMENTATION*

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District of Columbia Public Schools

Introduction

A practical application of the PMI Model can be illustrated with the evaluation of the District of Columbia Public Schools' Student Progress Plan (SPP) implementation.

In September 1980 the District of Columbia Public Schools implemented its Student Progress Plan, a plan which adheres to the principle that the student be encouraged to move along ar instructional continuum at his or her individual rate. The plan implies greater flexibility and boldness in the organization of the local school and in the efficient utilization of school staff and resources.

There are two major aspects of the plan. First, it is a vertical organization of the educational program whereby students progress through the instructional activities and experiences at their individual rates; and secondly, it is the assignment of students to the next higher instructional level at the end of the semester (semester promotion) if they have met the skill requirements of the current instructional level.

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The Division of Research and Evaluation employed the PMI Model to evaluate the implementation of the Student Progress Plan in grades 1-3 for school year 1980-81. Because of the Student Progress Plan's great emphasis on process, the PMI model was especially appropriate. It allowed for the enumeration of intended inputs, processes and outcomes, monitoring of each stage of implementation, and easy identification of discrepancies.

Gaining Acceptance

An initial step towards the application of the PMI Model was that of orientation. The model was presented and explained to various levels of potential users beginning with the Office of the Superintendent of Schools. Orientation for each group included: (1) an explanation of how and why the model was developed; (2) a description of the overall design of the model; (3) a comparison of the model with other existing models; (4) a listing of the advantages of the model in evaluating programs and operations; and (5) a demonstration of an application of the model. Since many of the persons responsible for the implementation of the Pupil Progress Plan had been included in the orientation session, they were already familiar with the PMI model.

Developing the Evaluation Design

Staff from the Division of Research and Evaluation met with the program developers in a series of planning sessions. The program goal and objectives and program plan were discussed. Evaluation questions were formulated. An evaluation design based on the PMI Model was then developed and submitted for review. (See Appendix A.)1/

1/ In the original design submitted to the program developers, only "Intended" columns were completed. The "Observed" columns have been completed since the implementation of the Plan based upon the data collected to date.

The initial data collection instruments (see Appendix B) served several purposes. With the completion of the principal and classroom teacher questionnaires, data was obtained for input and process observations and a determination was made as to whether there was agreement or discrepancy between intended and observed inputs and processes. Also, the problems encountered during implementation were specified and staff development needs were identified. The immediate feedback provided the process data necessary for the program planners to make revisions in plans and to schedule in-service training where necessary. The formative evaluation data already obtained has been properly recorded (see "Observed" columns for inputs and processes in Appendix A) and it will be available to explain program outcomes.

Implementation Concerns

As in any evaluation effort, it is most beneficial for the evaluators, program planners, and program implementers to plan together at each step of the evaluation process beginning with the initial design. When there is a breakdown in communication, or change in direction on the part of any one group it can cause confusion and delays. Agreement among all parties involved is very important to keep open the channels of communication.

During the tremendous activity that usually accompanies the implementation of any new program and because of a system reorganization resulting in the reassignment of staff, lines of communication initially established between the respective program and evaluation staffs were disrupted. As a result, some data collection was initiated by the program developers which did not correspond to the original evaluation design; fortunately, the model is flexible so that mechanisms to obtain additional information could be incorporated without having to exclude the collection of data originally prescribed by the Plan.

APPENDIX A

EVALUATION DESIGN

STUDENT PROGRESS PLAN [1/]
Grades 1-3, SY 1980-81

Overview

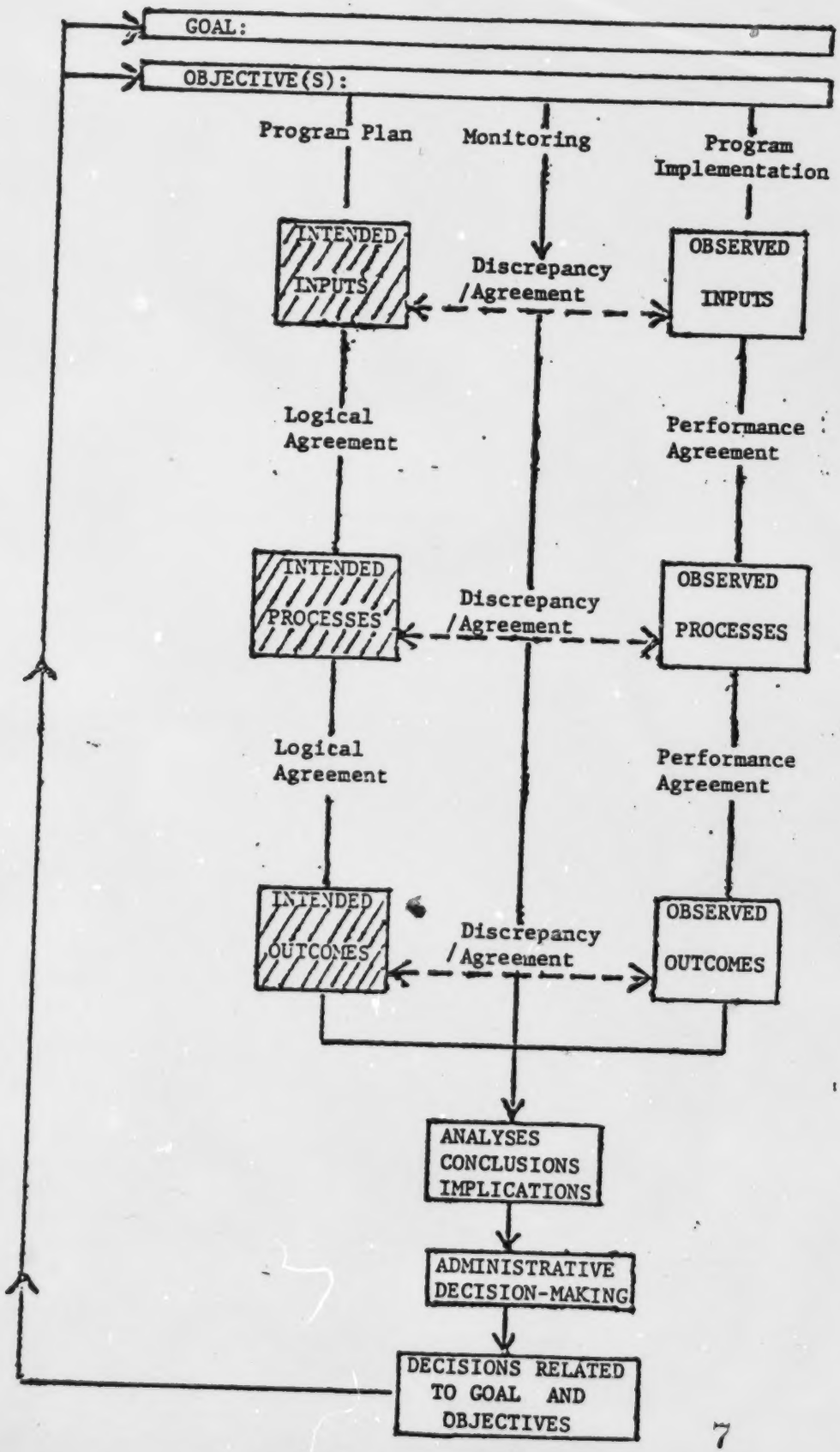
The Planning, Monitoring, and Implementation (PMI) Evaluation Model for Decision-making provides the framework for this evaluation design. A description of the plan, implementation, and monitoring results for inputs, processes, and outcomes will be presented in Parts I - III, respectively. The description will be followed by an analyses of the performance agreement between processes and outcomes (Part IV). The performance agreement analyses will be followed by an overall analyses of all intended and observed comparisons to determine the extent to which the objective was met and the conditions which contributed to the observed outcomes (Part V).

Data Collection

1. Appropriate instruments (existing and to be constructed) will be completed by administrators, teachers, and parents.
2. Data collected will include: Enrollment by school, entry dates and ages of first graders, enrollment by class and progress level; number of students promoted by progress level each semester; and feedback from principals, teachers, parents, and students (as to workload, time constraints, achievement, motivation, strengths, and weaknesses, likes and dislikes, and suggestions); and other evidences to document implementation.

1/ The Office of School Operations will develop the implementation plan by June 1980. DRE will finalize evaluation procedures and timelines by August 1980.

EVALUATION MODEL SCHEMATIC



PLANNING, MONITORING, AND IMPLEMENTATION (PMI)
EVALUATION MODEL FOR DECISION-MAKING

Reporting Format

Goal

Objective

Sub-objective

INTENDED (planned)		OBSERVED (implemented)	
Inputs	Monitoring	Inputs	Performance Agreement
Processes	Monitoring	Processes	Performance Agreement
Outcomes	Monitoring	Outcomes	
Analyses, Conclusions, Implications			
Decisions			

PLANNING, MONITORING, AND IMPLEMENTATION (PMI)
EVALUATION MODEL FOR DECISION-MAKING

Reporting Form

PART I

Goal: To establish a Student Progress Plan in Grades 1-3 for school year 1980-81.

Objective: To implement a plan for mid-year promotion for students in grades 1-3 during school year 1980-81 as evidenced by establishment of specific criteria for promotions in the areas of reading and mathematics, and by the number of students promoted each semester.

INPUTS

INTENDED	MONITORING	OBSERVED
1. Principals and instructional support staff of all public elementary schools.	Agreement	1. Principals and staff of 125 public elementary schools implemented SPP.
2. All students in grades 1-3	Agreement	2. All students in grades 1-3 were placed in the program.
3. Teachers of regular grades 1-3	Agreement	3. 910 teachers of regular grades 1-3 implemented the program.
4. Teachers chosen for transitional classes	Agreement	4. Teachers were assigned to transitional classes the second semester (2/2/81).
5. Parents of students in grades 1-3	Agreement	5. Parents of all students in grades 1-3 were called in for conferences.
6. Competency-based curriculum guides	Agreement	6. The curriculum guides were used for instruction.
7. Implementation plan	Agreement	7. The multi-year education plan was development and disseminated. A handbook titled "Implementing a Compentency-Based Program" was also developed.

PLANNING, MONITORING, AND IMPLEMENTATION (PMI)
EVALUATION MODEL FOR DECISION-MAKING

Reporting Form

PART II

Goal: To establish a Student Progress Plan in Grades 1-3 for school year 1980-81.

Objective: To implement a plan for mid-year promotion for students in grades 1-3 during school year 1980-81 as evidenced by establishment of specific criteria for promotions in the areas of reading and mathematics, and by the number of students promoted each semester.

PROCESSES

INTENDED	MONITORING	OBSERVED
1. Students who are or will become six (6) years of age on or before September 30 of the current school year are eligible for admission to the first grade at the beginning of the first semester.	Agreement	1. Students who were six years of age on or before September 1980 were eligible for admission to first grade in the first semester .
2. Students who are or will become six (6) years of age on or before February 28 of the current school year are eligible for admission to the first grade at the beginning of the second semester.	Discrepancy	2. Students who become six years of age on or before February 28, 1981 were not elibible for admission to the first grade at the beginning of the second semester (2/2/81).
3. An initial health screening will be required for all students upon entry into the public school system	Agreement	3. All students were screened according to normal school system practice and procedures.
4. Each grade (1-3) will be divided into two levels "A" and "B" (six levels of progress) to indicate a two semester organization within the school year.	Agreement	4. Each grade 1-3 was divided into levels "A" and "B" for reading and mathematics.
5. Teachers utilizing a variety of diagnostic instruments will place students into level "A" or "B" for reading and for mathematics.	Agreement	5. Teachers utilizing a variety of diagnostic measures placed their students into instructional level "A" or "B" for reading and mathematics.
6. Teachers will utilize the competency-based curriculum guides to identify the hierarchy of skills to be mastered in each semester.	Agreement	6. Teachers under the supervision of curriculum area specialists identified skills to be mastered at each instructional level in each semester.
7. Promotions will take place at the end of each semester.	Agreement	7. Promotions took place at the end the first semester (1/30/81).

PLANNING, MONITORING, AND IMPLEMENTATION (PMI)
EVALUATION MODEL FOR DECISION-MAKING

Reporting Form

PART II (Continued)

Goal: To establish a Student Progress Plan in Grades 1-3 for school year 1980-81.

Objective: To implement a plan for mid-year promotion for students in grades 1-3 during school year 1980-81 as evidenced by establishment of specific criteria for promotions in the areas of reading and mathematics, and by the number of students promoted each semester.

PROCESSES

INTENDED	MONITORING	OBSERVED
8. The teacher of each grade will meet with parents during the first five weeks of school to present the list of reading and mathematics skills which are to be taught.	Discrepancy	8. Conferences between teachers and all parents did not take place within the first five weeks of the program.
9. Student advancement from level "A" to "B" within the grade and from grade to grade will be based on mastery of the identified skills.	Agreement	9. Teachers used mastery of identified skills for advancing students from level "A" to "B" within grade and from grade to grade.
10, Parents will be advised on the student's progress at the end of the first advisory (nine weeks) by means of a copy of the Reading and Mathematics Skills Checklist which will accompany the report card.	Agreement	10. Reading and Mathematics skills checklists for each student accompanied the report card.
11. In those cases where the student is deficient and may be subject to retention, a conference should be held with the parent to discuss the skills to be mastered and to formulate an assistance plan toward achievement during the second advisory.	Agreement	11. Conferences were arranged with parents of students who were found to be dificient and subject to retention.
12. A skills laboratory designed to provide a variety of multi-level and multi-modal instructional materials for strengthening specific student skills will be established.	Agreement	12. A skills laboratory providing a variety of multi-model instructional materials for strengthening specific student skills was established in each school.

PLANNING, MONITORING, AND IMPLEMENTATION (PMI)
EVALUATION MODEL FOR DECISION-MAKING

Reporting Form

PART II (Continued)

Goal: To establish a Student Progress Plan in Grades 1-3 for school year 1980-81.

Objective: To implement a plan for mid-year promotion for students in grades 1-3 during school year 1980-81 as evidenced by establishment of specific criteria for promotions in the areas of reading and mathematics, and by the number of students promoted each semester.

PROCESSES

INTENDED	MONITORING	OBSERVED
13. At the end of a semester students who have mastered at least 70% of the skills (including all critical skills) defined for a grade in reading and in mathematics will be promoted to the next grade.	Agreement	13. At the end of the first semester (1/30/81) all students who had mastered at least 70% of the skills (including all critical skills) were promoted to the next level.
14. Students who have, at the end of each semester, demonstrated mastery of skills in only one of the two areas (reading and mathematics) will be placed in a transitional self-contained class at the next level/grade.	Agreement	14. Students who at the end of the first semester (1/30/81) had mastered skills in only one subject area (reading or mathematics) were placed in a transitional class.
15. Each regional office will monitor the implementation of the student progress plan in the schools in that region.	Agreement	15. Each regional office monitored the implementation of SPP in its schools using the approved monitoring form.

PLANNING, MONITORING, AND IMPLEMENTATION (PMI)
EVALUATION MODEL FOR DECISION-MAKING

Reporting Form

PART III

Goal: To establish a Student Progress Plan in Grades 1-3 for school year 1980-81.

Objective: To implement a plan for mid-year promotion for students in grades 1-3 during school year 1980-81 as evidenced by establishment of specific criteria for promotions in the areas of reading and mathematics, and by the number of students promoted each semester.

OUTCOMES

INTENDED	MONITORING	OBSERVED
1. Students in grades 1-3 are able to repeat portions of levels within the grade without the loss of a complete year.		
2. Placement according to student needs is adjusted more frequently		
3. Teachers and students evidence increased motivation due to the fresh start each semester.		
4. Students are provided with more frequent opportunities to achieve satisfaction of having reached a precise goal each semester.		
5. Parents are more involved and made more aware of their child's progress.		
6. A continuous progress plan is worked out that can be extended to grades 4-6 for school year 1981-82.		

PLANNING, MONITORING, AND IMPLEMENTATION (PMI)
EVALUATION MODEL FOR DECISION-MAKING

Reporting Form

PART IV

Goal:

Objective:

Sub-objective:

PERFORMANCE AGREEMENT

OBSERVED INPUTS/OBSERVED OUTCOMES

The plan to admit students, who recently turned six years old, to first grade the second semester had to be set aside due to budgetary constraints.

Due to the systemwide mandatory reduction-in-force in July and August 1980, many adjustments had to be made in staffing and in program implementation. It was not possible to adhere to all planned timelines. Teachers were unable to meet with parents during the first five weeks of school.

OBSERVED PROCESSES/OBSERVED OUTCOMES

PLANNING, MONITORING, AND IMPLEMENTATION (PMI)
EVALUATION MODEL FOR DECISION-MAKING

Reporting Format

PART V

Goal:

Objective:

Sub-objective:

ANALYSES/CONCLUSIONS/IMPLICATIONS

DECISIONS

APPENDIX B

STUDENT PROGRESS PLAN IMPLEMENTATION

PRINCIPAL QUESTIONNAIRE

YOUR RESPONSE TO THIS QUESTIONNAIRE IS CRUCIAL FOR THE SYSTEMWIDE EVALUATION OF THE IMPLEMENTATION OF THE STUDENT PROGRESS PLAN IN GRADES ONE-THREE, SCHOOL YEAR 1980-81. YOUR RESPONSES SHOULD REFLECT THE SITUATION IN YOUR SCHOOL AS OF OCTOBER 31, 1980.

Region ___ School _____

PART I

The following tasks are taken from the "Principal's Checklist for Student Progress Plan." Indicate by checking the appropriate column ONLY those tasks which have been COMPLETED (successfully met) and those which may pose a PROBLEM (you anticipate a problem) for completion.

TASKS	Completed	Problem
1. Review with faculty the Student Progress Plan to focus on the strategies necessary to implement the program.		
2. Reissue to parents the Superintendent's Memorandum dated June 2, 1980 regarding the Student Progress Plan.		
3. Plan and implement orientation sessions for parents.		
4. Analyze school and class profile data (PRT and PMT) with reference to the reading and mathematics scores of students.		
5. Organize school for grade placement of students and instructional groups using PRT and PMT assessment data in reading and mathematics.		
6. Schedule both resource and classroom-based instructional staff to provide needed prescriptive teaching for students with identified needs.		
7. Provide for in-depth and extended experiences using reading and mathematics skills laboratories for students in need of remediation; top priority be given to identified third graders.		
a. Identify the third grade students who are two years below grade level in reading and mathematics.		
b. Give top priority to the scheduling of those identified students into reading and mathematics skills laboratories.		
c. Assign the identified students to reading, mathematics and building resource teachers.		

TASKS	Completed	Problem
8. Supervise the classroom and resource teachers, librarians and counselors in the use of individual student data and the curriculum guides for instructional planning and program implementation.		
9. Schedule the required conferences in accordance with the plan for parents to receive information related to student progress.		
10. Provide on-going staff development, where needed, for staff in the use of CBC technology and curriculum guides.		
11. Use the CBC team for communicating with staff and for problem solving in instruction.		
12. Use systematic record keeping and reporting procedures which monitor student progress and level of skill mastery. (Included in this system are the skills checklists for reading and mathematics.)		
13. Review the teacher's record of parent conferences.		
14. Provide continuous monitoring and evaluation of the implementation of the student progress program in your school.		
15. Determine the number of students for:		
a. Advancement to the next grade level placement.		
b. Transitional classes or groups.		
c. Retention in the current grade level.		
16. Organize classroom and resource teachers to provide instruction for each of the groups identified.		

PART II

Indicate which instructional grouping plans are being used at grades 1, 2 and 3 in your building for reading and mathematics - Reference: Administrator's Handbook p. 18.

	For Reading			For Mathematics		
	Grade 1	Grade 2	Grade 3	Grade 1	Grade 2	Grade 3
1. The Joplin Plan	____	____	____	____	____	____
2. Departmentalization	____	____	____	____	____	____
3. Team Teaching	____	____	____	____	____	____
4. Multi-age, Multi-level Groupings	____	____	____	____	____	____
5. Peer Teaching or Tutorial Groupings	____	____	____	____	____	____
6. Teacher Rotation on Grade Level	____	____	____	____	____	____
7. Interest and Research Grouping	____	____	____	____	____	____

PART II (continued)

8. Plans other than ones listed (specify for each area):

Reading - Grade 1 _____

Grade 2 _____

Grade 3 _____

Mathematics - Grade 1 _____

Grade 2 _____

Grade 3 _____

PART III

Indicate the involvement of your support staff to ensure successful implementation of the Student Progress Plan by checking the appropriate column.

	Yes	Not at This Time	Staff Not Available
1. Students identified as having skill deficiencies in reading and mathematics are instructed by:			
a. The reading resource teacher.....			
b. The mathematics resource teacher			
2. Students are assessed and reasigned by:			
a. The reading resource teacher			
b. The mathematics resource teacher			
3. Learning center(s) were set up by:			
a. The reading resource teacher			
b. The mathematics resource teacher			
4. Seminars and workshops for staff development are conducted by:			
a. The reading resource teacher			
b. The mathematics resource teacher			
c. Other (specify) _____			
5. Enrichment programs are conducted by:			
a. The reading resource teacher			
b. The mathematics resource teacher			
c. The classroom teacher			
d. Other (specify) _____			

PART III (continued)

	Yes	Not at This Time	Staff Not Available
6. For students identified as performing above and below their instructional level a:			
a. Reading lab was set up and/or managed by the reading resource teacher			
b. Mathematics lab was set up and/or managed by the mathematics resource teacher			
7. It has been encouraged that the identified reading and mathematics skill deficiencies be included in courses taught by:			
a. The music teacher			
b. The physical education teacher			
c. The art teacher			
d. Other (specify) _____			
8. The school librarian teaches research and study skills			
9. The librarian is encouraged to reinforce reading and mathematics skills by coordinating library activities with classroom teachers and other support staff			
10. The counselor:			
a. Works closely with students, teachers and parents in assessing student progress			
b. Assists teachers in interpreting test scores to parents			
c Designs each semester a pupil, class, and school profile to demonstrate the level of student achievement.			
d. Recommends direction for students who repeatedly remain in transitional classes			
e. Counsels students relative to instructional, social, and emotional problems			
f. Provides career awareness activities			

PART IV

Check the appropriate columns to indicate that a skills laboratory is <u>set up and</u>:	For Reading		For Mathematics	
	Yes	No	Yes	No
1. Staffed with qualified full-time professionals assisted by trained volunteers				
2. Accessible to students and teachers throughout the school day ...				
3. Contains a variety of multi-level, multi-modal materials				

PART IV (continued)

	For Reading		For Mathematic	
	Yes	No	Yes	No
4. Has realistic student scheduling (no more than 75 and no less than 50 students per day; from 17 to 20 students per period).....				
5. Equipped with necessary furniture, supplies and materials, suitably arranged				
6. Has coded learning materials so that they may be easily located and used				
7. Has flexible room arrangement				
8. Has a management system which includes:				
a. Guidelines for operation of the lab				
b. A listing of appropriate student objectives				
c. Pretests and posttests				
d. Student record forms				
e. Student progress sheets				
f. Wall chart/class progress chart				
g. Individual diagnostic reports				
9. Has adequate, secure storage areas				

PART V

1. How many third grade students who are two years or more below grade level have been identified in your school? in reading? _____ in mathematics? _____

2. For those students indicated in number 1 above, what programs and/or services have been offered? Explain specifically.

In reading _____

_____

_____

_____

In mathematics _____

_____

_____

_____

STUDENT PROGRESS PLAN IMPLEMENTATION

CLASSROOM TEACHER QUESTIONNAIRE

YOUR RESPONSE TO THIS QUESTIONNAIRE IS CRUCIAL FOR THE SYSTEMWIDE EVALUATION OF THE IMPLEMENTATION OF THE STUDENT PROGRESS PLAN IN GRADES ONE-THREE, SCHOOL YEAR 1980-81. YOUR RESPONSES SHOULD REFLECT THE SITUATION AS IT PERTAINS TO YOUR STUDENTS/CLASSROOM AS OF OCTOBER 31, 1980.

Region _____ School _____

Grade Level (i.e. first, second, 2-3 combination, etc.) _____

PART I

Please write, in the appropriate blank, the number of students in your class who, as of October 31, 1980, were assessed at each of the following instructional levels in reading and mathematics.

Assessed Instructional Level	Number In Reading	Number In Mathematics
Below Level 1A	_____	_____
At Level 1A	_____	_____
At Level 1B	_____	_____
At Level 2A	_____	_____
At Level 2B	_____	_____
At Level 3A	_____	_____
At Level 3B	_____	_____
Above Level 3B	_____	_____
Class Totals	_____	_____

PART II

1. Is it clear to you what your role and responsibilities are in implementing the Student Progress Plan?

   Yes ____ No ____

   If "No," state what aspects are not clear.

2. What additional assistance do you need to carry out your role and responsibilities relative to the Student Progress Plan?

3. Approximately what percentage of your students' parents have you communicated with to identify the reading and mathematics skills to be mastered by the student? (Check One)

0% to 25% _____ 26% to 50% _____ 51% to 75% _____ 76% to 100% _____

If less than 100% explain why.

4. Comments and/or suggestions.